

## **Case 10912**

### **Atypical presentation of a cervical cancer**

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**Section:** Genital (Female) Imaging

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**Patient:** 35 year(s), female

### **Authors' Institution**

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### **Clinical History**

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35-year old woman underwent gynecologic examination one month after delivery which revealed a cervical polyp. The polyp was removed and the pathological analysis was positive for malignancy. Magnetic resonance was made for local staging. Three months later radical hysterectomy was performed and a painful episiotomy scar nodule was also excised.

### **Imaging Findings**

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A pelvic MR revealed high signal intensity tumor of the anterior cervix, surrounded by low signal intensity cervical stroma (FIGO IB1) and linear episiotomy perineal scar with low signal intensity on T2-weighted images and high on T1-weighted images with fat saturation (Figure 1). Three months later radical hysterectomy, bilateral adnexectomy and pelvic lymphadenectomy were performed. At the same surgical time a painful episiotomy scar nodule was also excised.

One month after surgery there was a painful and fast growing perineal lesion at the episiotomy scar site. MR was repeated and revealed an heterogeneous mass with cystic areas, casting the puborectal

muscle. The lesion had mainly intermediate signal intensity on T2-weighted images and low signal intensity on T1-weighted when compared to the adjacent muscles (Figure 2).

Bilateral lymphoceles were noticed on axial and coronal T2-weighted images (Figure 3).

Vaginal stump showed low signal intensity on T2-weighted images (Figure 2).

## Discussion

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Cervical carcinoma is the most common gynecologic malignancy worldwide [1]. It is the second most common cause of cancer related death in women, with the majority of affected women living in third world countries [2]. Because of its epidemiological characteristics cervical carcinoma continues to be staged at clinical examination.

The revised FIGO staging system now recommends performing computed tomography or MR imaging when available [1].

The most common histologic type of cervical carcinoma is squamous cell carcinoma (90%), followed by adenocarcinoma (5-10%). Other rare histologic types include small-cell carcinoma, adenosquamous carcinoma and lymphoma [3].

Histological examination of cervical polyp and uterus revealed adenosquamous carcinoma. The episiotomy scar nodule was a metastasis.

Cervical cancer is characterized by continuous invasive growth [2]. Metastatic disease occurs typically by local extension and lymphatic dissemination. Hematogenous metastases usually occur less frequently, mainly involving the liver, lung and bone. Previous reports have shown that advanced disease, bulky tumor, endometrial extension, and lymph node metastases are associated with an increased rate of distant metastases [5]. There are some rare cases of breast [4], brain [5], bone [6], heart [7], soft tissue [8] and incisional site metastases [9].

Symptoms are infrequent in the early stages of the disease, but post-coital bleeding, metrorrhagia, and diffuse pelvic pain are common symptoms in advanced disease [2]. In this patient cervical cancer, was found during a routine medical appointment one month after delivery.

MR is able to depict important prognostic findings, including tumor size, parametrial and pelvic sidewall invasion, bladder or rectal invasion, and lymph node metastases. Accurate risk stratification of patients with cervical carcinoma is used to determine the most appropriate management pathway [1]. On T2-weighted images, cervical carcinoma appears as an intermediate to high signal intensity mass that replaces the low signal intensity cervical stroma [1].

MR is the first-line modality for follow up after radiation therapy and whenever tumor recurrence is suggested by clinical or gynecological findings [2].

Radiotherapy and chemotherapy were performed for the persistent perineal disease which grew aggressively and showed no therapeutic response; lesion progression resulted in the extension into the root of the thigh and abdominal wall.

This case illustrates a rare presentation of a rare histologic type of cervical cancer, with an aggressive behavior, and a histologically proven metastasis of the episiotomy scar.

Unfortunately, the patient died one year after diagnosis, due to complications related to progression of the perineal disease.

## Final Diagnosis

Cervical adenosquamous carcinoma, with an episiotomy scar metastasis.

## Differential Diagnosis List

Perineal myxoid stromal tumour, Malignant degeneration of endometriosis of the episiotomy scar, Adenoid cystic carcinoma of Bartholin's gland, Granular cell tumor of vulva on episiotomy scar, Neurinoma of the episiotomy scar, Endometriosis of the episiotomy scar, Abscess of the episiotomy scar, Foreign body in an episiotomy scar

## Figures

**Figure 1 Pelvic MR**



T2-weighted image on sagittal plane shows an 3 x 1 cm, anterior cervical tumor (arrow).

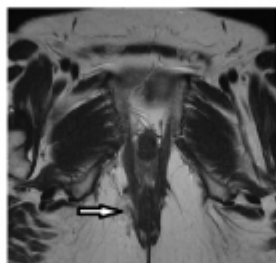
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Area of Interest: Genital / Reproductive system female;

Imaging Technique: MR;

Procedure: Staging;

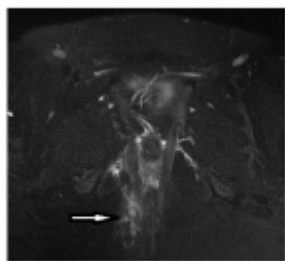
Special Focus: Neoplasia;



Axial oblique T2-weighted image shows a linear densification of the peri-rectal fat with low signal intensity on the episiotomy site (arrow).

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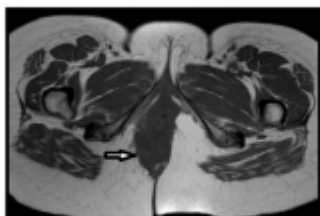


Axial oblique T1-weighted whit fat saturation image shows a linear densification of the peri-rectal fat with high signal intensity on the episiotomy site (arrow).

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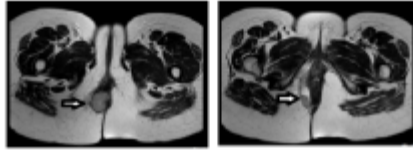
**Figure 2 Pelvic MR**



T1-weighted image on axial plane showing a low intensity mass (arrow) on the right ischioirectal fossa.

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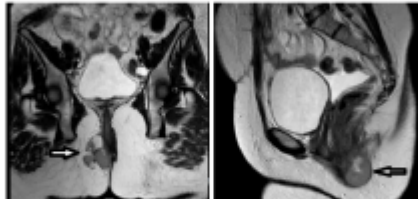
Area of Interest: Genital / Reproductive system female;  
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Procedure: Staging;  
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T2-weighted images on axial plane showing an heterogeneous intermediate signal intensity mass with cystic areas (arrow) on the right ischioirectal fossa.

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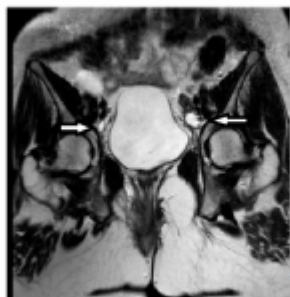


T2-weighted images on coronal and sagittal planes showing an heterogeneous intermediate signal intensity mass with cystic areas (arrow) on the right ischioirectal fossa and normal appearance of the vaginal stump after hysterectomy.

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**Figure 3 Pelvic MR**



T2-weighted image on coronal plane showing bilateral high intensity signal lymphoceles (arrows).

Area of Interest: Genital / Reproductive system female;  
Imaging Technique: MR;  
Procedure: Staging;  
Special Focus: Neoplasia;

## MeSH

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### **Cervix Neoplasms** [C04.588.945.418.948.170]

Tumors or cancer of the uterine cervix.

### **Neoplasm, Residual** [C04.697.700]

Remnant of a tumor or cancer after primary, potentially curative therapy. (Dr. Daniel Masys, written communication)

## References

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## Citation

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